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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/14/2000

Carl Dionne

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08/09/2006

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EXAMINER

DELGADO, MICHAEL A

ART UNIT

PAPER NUMBER

2144

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/735,925	DIONNE ET AL.	
	Examiner	Art Unit	
	Michael S. A. Delgado	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8, 9, 11-14, 16, 17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-9, 11-14, 16-17 and 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-9, 11-14, 16-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,067,551 by Brown et al in view of US Patent No. 6,112,315 by Kuruvila et al.

In claim 1, Brown teaches about an apparatus for sharing data over a network, having a plurality of network-connected terminals "multi-user", each terminal comprising (Col 4, lines 5-20),

visual display(Fig 1, 47);

a processing (Fig 1, 21);

storage (Fig 1, 32); and

memory (Fig 1, 22); wherein

said memory in the terminal includes

computer program instructions for normal operations including duplication of data-containing object from a second of said network connected terminals "shared server" at a first of said network-connected terminals (any of the multi-user) in response to a data requirement of said first terminal (Fig 1, 36) (Col 4, lines 5-20);

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computer program instructions to access data in said object using locally executed object instructions at said first terminal (Col 4, lines 5-20); and (Editing instructions use to edit document).

said computer program instructions for normal operations including maintaining data consistency between the data contained in duplicated objects "reconciling process" (Col 3, line 60-Col 4, line 5) but does not explicitly teach about establishing a duplicate master data-containing object, wherein the role of said duplicate master is switchable between said duplicated objects when a pervious duplicate master become unavailable.

Brown teaches the need to fully recovery from a system failure (Col 2, lines 20-25). Kuruvila teaches about a method for system recovery, in which a duplicate object "spare M2" is created and in the case of the master "M1" failing, the duplicate object "spare M2" becomes the master (Col 3, lines 30-60). Kuruvila approach makes it possible for the master and the spare to switch role in a transparent manner without affecting the clients (Col 3, lines 55-63). This is desirable for client service operation as subscribers to the service is not affected when a system failure occurs.

It would have been obvious at the time of the invention for some of ordinary skill to improve on the invention of Brown by incorporating the method of Kuruvila, which provide a transparent means for system recovery.

In claim 2, Brown combined with Kuruvila, teaches about an apparatus according to claim 1, wherein said instructions are either stored in said storage or are loaded from an external medium and retrieved into said memory (Brown Col 9, lines 10-15). (Application program is loaded in to memory from hard drive)

In claim 3, Brown combined with Kuruvila, teaches about an apparatus according to claim 1, wherein said instructions maintain data consistency between duplicated objects monitor central Processing Unit usage and network bandwidth utilization “timing issues” (Brown Col 4, lines 28-35) (Brown Col 2, lines 60-65).

In claim 4, Brown combined with Kuruvila, teaches about a method of sharing data over a network, having a plurality of network-connected terminals, each terminal comprising memory a processing , said memory in terminal including computer program instructions for managing object duplication, during normal operation including steps of (Brown Col 4, lines 7-15) (Brown Col 7, lines 30-50);

(a) in response to a data requirement of a first of said network terminals, duplicating a data-containing object from a second of said network terminals “share server” at said first terminal (Brown Col 4, lines 5-20);

(b) at said first terminal, accessing data in said object using locally executed object instructions (Brown Col 4, lines 5-20); and (Editing instructions use to edit document).

(c) maintaining consistency between data contained in duplicated objects “reconciling process” by establishing a duplicate master data-containing object, wherein the role of said duplicate master is switchable between said duplicated objects when a pervious duplicate master become unavailable (Brown Col 3, line 60-Col 4, line 5) (Covered in Claim 1) .

In claim 5, Brown combined with Kuruvila, teaches about a method according to claim 4, wherein said object duplication instructions for managing object duplication constitutes a duplication manager “MCF” (Brown Col 5, lines 40-60) (Brown Col 4, lines 5-20).

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In claim 6, Brown combined with Kuruvila, teaches about a method according to claim 4, wherein said object from a second of said network terminals is said duplicate master (Brown Col 5, lines 40-60).

In claim 8, Brown combined with Kuruvila, teaches about a method according to claim 4, wherein said duplicate master updates said duplicate (Brown Col 5, lines 40-60).

In claim 9, Brown combined with Kuruvila, teaches about a method according to claim 4, wherein only one duplicate master exists for a group of duplicates (Brown Col 5, lines 40-60).

In claim 11, Brown combined with Kuruvila, teaches about a method according to claim 4, wherein said switching is the result of a command, called load-balancing, or the result of an automatic fault-recovery process performed by the duplication manager (Brown Col 3, lines 20-30).

In claim 12, Brown combined with Kuruvila, teaches about a method of sharing data over a network, having a plurality of network-connected terminals, each terminal comprising memory and a processor, said memory in the terminal including computer program instructions for managing object duplication during normal ongoing operations including (Brown Col 7, lines 30-50):

(a) in response to an availability of a list of said network terminals, duplicating a data-containing object from a second of said network terminals "shared server" at said first terminal (Brown Col 4, lines 5-20):

(b) at said first terminal, accessing data using locally executable object instructions (Brown Col 4, lines 5-20); and (Editing instructions use to edit document).

(c) maintaining consistency between data contained in duplicated objects by establishing a duplicate master data-containing object, wherein the role of said duplicate master is switchable between said duplicated objects when a pervious duplicate master become unavailable (Brown Col 3, line 60-Col 4, line 5) (Covered in Claim 1).

In claim 13, Brown combined with Kuruvila, teaches about a method according to claim 12, wherein said object duplication instructions for managing object duplication constitute duplication manager “MCF” (Brown Col 5, lines 40-60) (Brown Col 4, lines 5-20).

In claim 14, Brown combined with Kuruvila, teaches about an method according to claim 12, wherein said object from a second of said network terminals is said duplicate master “MCF” (Brown Col 5, lines 40-60) (Brown Col 4, lines 5-20).;

In claim 16, Brown combined with Kuruvila, teaches about a method according to claim 12, wherein said duplicate master updates said duplicate (Brown Col 5, lines 40-60);

In claim 17, Brown combined with Kuruvila, teaches about a method according to claim 12, wherein only one duplicate master exists for a group of duplicates (Brown Col 5, lines 40-60).

In claim 19, Brown combined with Kuruvila, teaches about a method according to claim 12, wherein said switching is the result of a command, called load-balancing, or the result of an

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automatic fault-recovery process performed by the duplication manager (Brown Col 3, lines 20-30).

In claim 20, Brown combined with Kuruvila, teaches about a computer-readable medium having computer-readable instructions executable by a computer during normal ongoing operations such that, when executing said instructions, a computer will (Fig 1):

(a) in response to a data requirement of a first network terminal of a plurality of network terminals, duplicate a data-containing object from a second of said plurality of network terminals at said first terminal (Brown Col 4, lines 5-20);

(b) at said first terminal, access data in said object using locally executed object instructions (Brown Col 4, lines 5-20); and (Editing instructions use to edit document).

(c) maintain consistency between data contained in duplicated objects by establishing a duplicate master data-containing object, wherein the role of said duplicate master is switchable between said duplicated objects when a previous duplicate master becomes unavailable (Brown Col 3, line 60-Col 4, line 5) (Covered in Claim 1).

In claim 21, Brown combined with Kuruvila, teaches about a computer-readable medium having computer-readable instructions executable by a computer such that, when executing said instructions, a computer will (Fig 1):

(a) in response to an availability of a list of network terminals, duplicate a data containing object from a second of said network terminals at a first of said terminals (Brown Col 4, lines 5-20);

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(b) at said first terminal, facilitate data access using locally executable object instructions (Brown Col 4, lines 5-20); and

(c) maintain consistency between data contained in duplicated objects by establishing a duplicate master data-containing object, wherein the role of said duplicate master is switchable between said duplicated objects when a previous duplicate master becomes unavailable (Brown Col 3, lines 60-67) (Covered in Claim 1).

In claim 22, Brown combined with Kuruvila, teaches about a method of accessing data over a network, said method comprising (fig 1):

maintaining a data object as a master data object at a first station (Fig 1, 36) (Col 4, lines 5-20);

duplicating copies of said master data object at a plurality of slave stations (Col 4, lines 5-20);

wherein the master data object is configured to maintain consistency between the data in said duplicated objects such that the master data object is maintained and said copies are updated (Col 4, lines 5-20); and

when said first station becomes unavailable during normal ongoing operations of said network, switching the role of the master data object to one of the duplicated data objects (Brown Col 3, lines 60-67) (Covered in Claim 1).

Response to Arguments

Applicant's arguments include the failure of previously applied art to expressly disclose the maintenance and updating of operational data. See Response, Remarks dated 04/25/2006,

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page 10, lines 5-21. It is evident from the detailed mappings found in the above rejection(s) that Kuruvila et al. disclosed this functionality in synchronizing a spare (duplicate object) with the master (Col 3, lines 30-55). Further, it is clear from the numerous teachings (previously and currently cited) that the provision for switching the master role to a spare and visa versa, was widely implemented in the networking art. Thus, Applicant's arguments drawn toward distinction of the claimed invention and the prior art teachings on this point are not considered persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 5,781,908 by Williams et al, teaches about a file data synchronizer in a distributed data computer network.

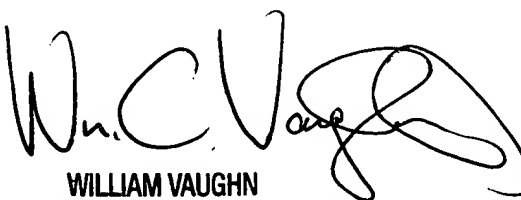
US Patent 6,742,023 by Fanning et al, teaches about an use-sensitive distribution system for transferring data files between users of computer network e.g. for users accessing a chat room or news group over the Internet and wanting to share files.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is (571)272-3926. The examiner can normally be reached on 7.30 AM - 5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn Jr. can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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